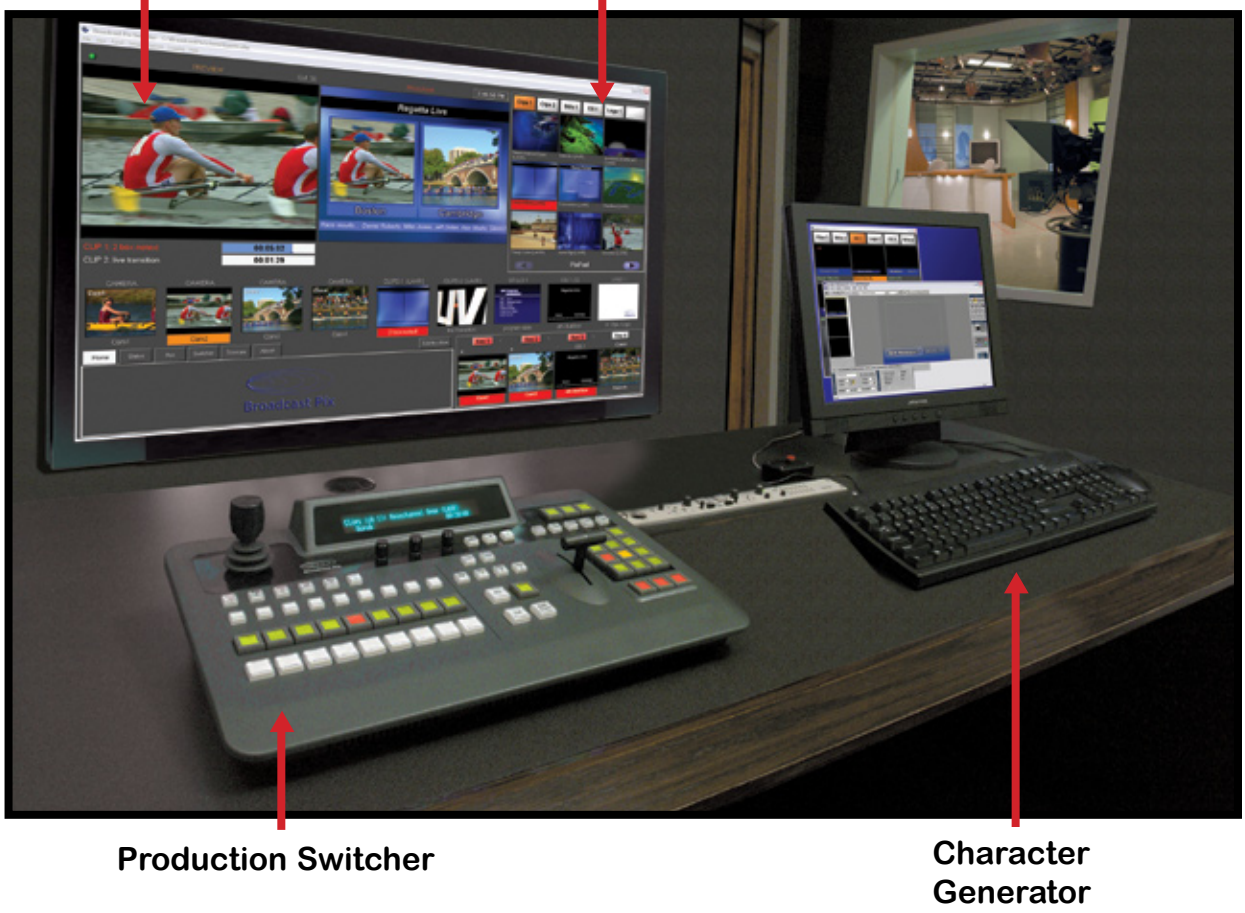
Slate
Switchers

The Switcher Redefined

Slate is an entire Control Room

Broadcast Pix

Slate is an entire Control Room



Drive from a Control Panel or a Touchscreen

The Switcher Redefined

Switchers used to just switch cameras.

Now Slate switchers include all the functions of a control room. And everything is so well integrated that it's easy to create the look of a high end production.

Now one person can create engaging live television on a switcher with a built-in character generator, clip store and full motion monitoring of outputs and sources. Options can extend control to robotic cameras and audio mixers.

When you still want a team, just network in more physical or soft panels --- anywhere, in the studio, in the back room or across the country.

Slate combines the human interface and on-air robustness of a switcher with the power of a contemporary workstation. It's so complete that you just add cameras, a VGA monitor or two and reference.

Slate mixes an exceptionally wide variety of video formats. Mix traditional 4:3 and 16:9 cameras and clips, without making people look too wide or too narrow. Mix broadcast cameras and other synchronous sources with laptops, DVD players and other asynchronous sources. Mix SDI digital with analog composite, S and component. And later in 2007, mix SD with HD SDI in 720p and 1080i.

Broadcast Pix switchers are now used by broadcasters and other leading live video production studios in over thirtyfive countries. We are based near Boston, with regional offices in California, North Carolina and The Netherlands.

Broadcast Pix

Broadcast
News, sports and events on major networks worldwide

Entertainment
Major league sports, stadiums and theaters

Corporate
Training, webcasts, presentations and events at leading corporations

Government
From city council meetings to military training

Faith
Projection and cable in America, Africa, Asia,...

Mobile
Outside broadcast trucks, flight packs and staging.

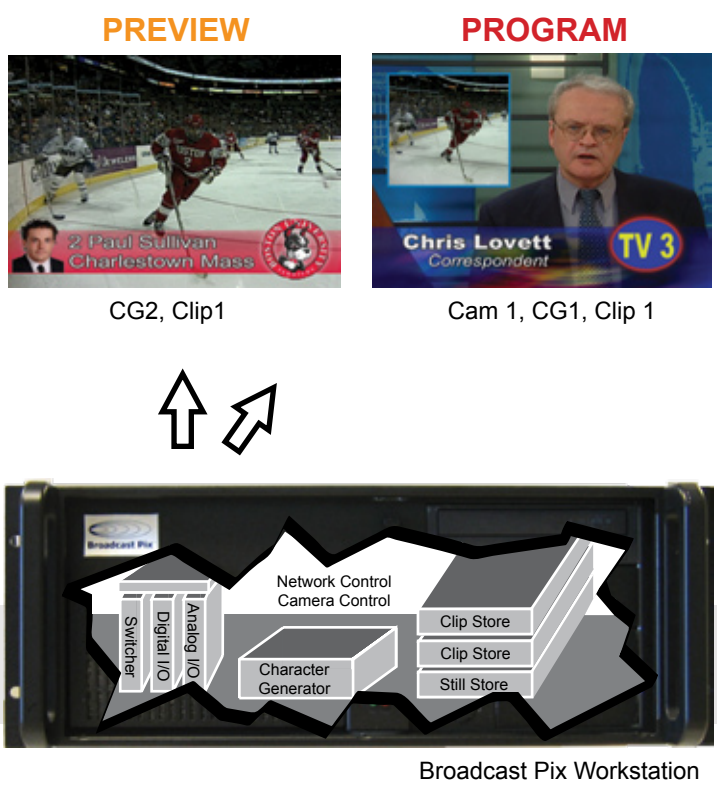
Education
From distance learning to events and stadiums

Slate Series

The only production switchers with integrated character generator, clip store and monitoring

It looks like a digital switcher. Look inside and you will see a built-in character generator from Inscriber, a clip store, a still store and a wall of monitors. It can even control cameras and audio. For the price of a conventional switcher, Broadcast Pix is a new generation of switcher that is a complete, easy to run, control room.

Slate puts more creative power into the hands of a single operator than any switcher ever. Shorthanded studios that seldom use many graphics will suddenly find how easy it is to add them to greatly improve the look of their productions. In the illustration, Camera 1 is on air with a title from the first channel of CG, and a clip over the shoulder squeezed into a DVE box. The clip is on preview with its own title from the second channel of CG.



CG2, Clip1

Cam 1, CG1, Clip 1

Broadcast Pix Workstation

4 Slate Models

Slate switchers come in four models. Each includes a workstation with a Slate board set and software installed. You can upgrade from any model to any other. You can update to HDTV in late 2007.

Slate 100

Switcher and character generator in a tower.

Includes:
- 4 to 8 live inputs
- 3 graphic stores
- 3 keyers
- Accepts SDI and/or analog composite, S, component
- HD IO available - late 2007

Slate 100pro

More pro features and a rack mounted workstation

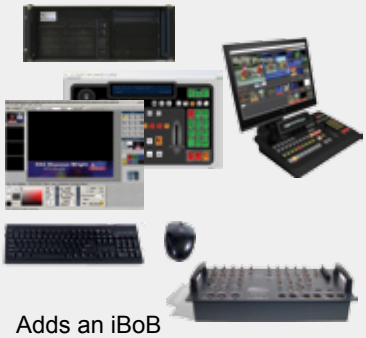
Adds:
- 1 clip store - hours of clips & animations, analog audio
- 3 DVE boxes, flying PiPs
- Rolls and crawls for CG
- 2 more graphic stores
- Auxiliary and clean outputs

Slate 1000

Adds a professional control panel

Panel features:
- PixButtons with the exact source and key content on the button.
- Classic switcher layout
- 3 Axis joystick, fader bar

Slate 2100



Adds an iBoB intelligent break-out box

iBoB features:
- 8 to 12 live inputs
- Fail-safe switching
- Downstream keyer
- Tally relays, adds AES/EBU

Plus 2 channel clip store

Multi-View Monitor

Included on all models

Custom Layout on Wall Monitor

Full Motion Monitoring of Program, Preview and Sources

Every Slate includes on-screen monitoring of preview, program and sources in full motion video. Video monitors are not needed but can be added if still desired. Live inputs and clip stores have motion, and other sources use thumbnails. They tally red on air, and orange on preview.

Key Monitors

You always know exactly what is on every keyer, with a full motion key monitor for each. They dynamically change as the key fill changes. Clearly see tally, rates, and if a DVE or chromakey is applied.

PixPad Thumbnail Libraries

Find content easily on the PixPad which shows the library of thumbnails for the selected source, which correspond to the panel's PixPad buttons.

Use Any Size Monitor and Customize Your Layout

Use any size VGA monitor, from a personal flat-screen to a huge wall mounted monitor. Arrange 20 moving monitors wherever you like, and individually size each monitor. Add clocks, clip counters, scripts and even audio meters for some mixers. Save different layouts for each show and operator. Or use factory layouts for 1280x1024 and 1680x1050 monitors.

Dual Monitors for a Second Operator

All Slate switchers support dual monitors, so when you want a separate graphic station just add a monitor for the CG, and open a SoftPanel, a PixPad library, and even full motion source monitors.

Switch on an Intuitive Moving Multi-View

It's an Interactive Multi-View on which you can switch. Just click on a source or key to select. Featured on the Slate 100. Beginners will find it the fastest way to learn switching, and pros will find it's a nice complement to a panel.

Integration of Multi-View Wall with…

Switcher
- Push-buttons for every source & key shown
- PixPad dynamically linked to thumbnail libraries
- Switch on the Multi-View itself with mouse or touchscreen to select keys, sources, take,…

Clip Store
- View clips in full motion on monitor
- View clip libraries & tally status
- View clip time code, countdown & attributes

CG
- View CG titles in keys & libraries
- View tally status of CG titles
- Right-click a CG thumbnail to edit "on the fly"

Still Store and Logo Store
- View loaded graphics, libraries & tally status
- Right-click a still or logo thumbnail to edit "on the fly"

Camera Control
- View cameras in full motion

Soft Switchers

Featured on Slate 100, and available on all models

Touchscreen or mouse

Switch on the Multi-View

Slate 100 for Easy TV

Intuitive Touchscreen

It has never been so easy for a beginner to create professional looking live video. A touchscreen and cameras are all you need to add to a Slate 100. Touchscreens have become very affordable, or you can use a conventional monitor with a mouse.

Cameras are shown on the monitor in full motion. Just touch the one you want and it goes to preview. Add keys on top of your previewed composition by just touching them. Change the graphic in a keyer by just touching it on the PixPad library. Then when your composition looks like what you want, just touch it and it goes to air.

It's so easy to learn that you can teach a novice to create great looking live TV on a Slate 100 in under 5 minutes.

Professional SoftPanel

While the touch screen monitor is so easy to switch on for the novice, the pro may feel more at home on a SoftPanel. It operates identically to the physical panel. The same classic switcher layout. The same device control. It even has soft knobs and a 3D joystick. It's great if you do not have a panel, or for a second operator to accompany someone on a panel or touchscreen. Open it in a web browser such as Microsoft Internet Explorer, and then you can be anywhere on the network, even at home across the Internet.

SoftPanel

Integration of Switcher with...

(Whether you use a panel, touchscreen or mouse)

Multi-View Monitoring
- View preview, program & camera sources in full motion, plus thumbnails of keys & libraries
- View tally status, transition rates & key settings

Clip Store
- On transition to air, auto-start clips & animations
- Use PixPad to view clip content libraries
- See active clip in source & keyer PixButtons

CG
- Use PixPad to view CG & select from libraries
- See active CG in source & keyer PixButtons
- On transition to air, auto-start roll & crawls
- Change crawl speed, even on-air
- Reposition any keyed graphic with a DVE

Still Store and Logo Store
- Use PixPad to view still & logo content libraries
- See active still & logo in source & keyer PixButtons
- Freeze an input, program or preview as a still
- Link chromakeys with stills for a virtual set

Camera Control
- Use joystick for tilt/pan/zoom, & PixPad for presets
- Use knobs for focus, iris & ccu settings

Panel Switchers

Included with 1000 and 2100, optional on 100

Classic Switcher Layout

The grey portion of the panel has a classic production switcher layout. Traditional switcher operators will feel at home. Preview is on the bottom then program, then fill and destination. Program is comprised of PixButtons so you always know what is on every source, even the exact name of the specific clip or graphic, and thumbnails are also shown on the Multi-View. The panel has 9 buttons per row, and you can shift for up to 18 total sources. A classic next transition section enables 3 keys to be in the transition, using a cut, mix or fade, and many wipe patterns.

Pristine Keyers

Slate features keyers of excellent quality that are easier to fill with compelling graphics than any other switcher, thanks to tightly integrated graphic and clip systems. All Slate models have 3 keyers standard, 3 more optional (option 126), and the Slate 2100 adds a DSK. Up to 6 DVEs (digital video effects) provide up to 6 picture in pictures, with 3 standard on most models. These can be squeezed, flown in, and have borders. The content of each keyer is shown on a PixButton and on the Multi-View, so you to always know what is on each key. One chromakey is standard for green and blue wall sets. Eight chromakeys are optional (option 140) for combining with the built-in still stores for a virtual set. You can even add keys to auxiliary outputs with the PowerAux option.

Device Controls

The black portion of the panel can be assigned to a built-in CG store, clip store, still store, camera control, keyer, output or other devices. Just press its device control button and the entire bank of controls is assigned, including: a PixPad with 12 PixButtons, 3 knobs, motion controls, a 3-axis joystick and display. These enable you to instantly and intimately control the selected device.

PixButtons

Unique PixButtons have displays built into the buttons. Each has an icon on top showing the device that is assigned to it. The number tells the channel of clip or graphic, or which camera is being controlled. The next two lines show the exact name of the content, which is automatically put on the button from its file names. PixButtons dynamically change during the production. This illustration shows a clip called River on clip channel 1. No other switcher does this. (patent pending)

Clip Store

Included on 100pro, 1000, 2100 and optional on 100

Built-in Clip Stores

All Broadcast Pix switchers can have a built-in clip store, with up to two channels of uncompressed digital clips. The 100pro and 1000 include a one channel clip store and the 2100 includes a two channel clip store. The first clip channel holds 2 hours, and the second increases storage to 4 hours. Clips can have a key channel, so can be used in keyed transitions and for animations. They reduce your dependence on external DDRs.

Easy to Use

The PixPad on the switcher panel shows the names of the clips on its PixButtons, as shown at the right. The Multi-View shows the corresponding thumbnails, and provides full motion monitoring of the active clips in both clip channels. Selecting a clip is as easy as pushing its PixButton, or clicking on its thumbnail. Use the motion buttons to play.

Auto-Start,…

The clip stores are tightly coupled to the switcher so it's easy for a single operator to add lead-ins, bumpers, and squeeze clips into a DVE box. Auto-Start is one of the best examples of how tight this integration is. Any clip or animation can be set to automatically start playing at the instant it is taken to air. No more careful cueing. No need for a second operator to insure your clips start when they are supposed to. Just press the controls button on the clip PixPad and the clip modifiers appear. Then select Auto-Start. You can also set it to auto-stop when it comes off air, auto rewind, mark-in, mark-out, and loop.

Uncompressed, QuickTime, DV, MPEG...

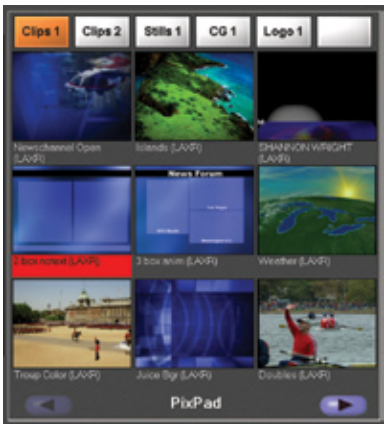
Now with Version 6 software, the clip store can play both uncompressed and compressed clips. You can still attach a tape deck or any video source and record uncompressed clips, and then play them. Now the clip store can also play compressed clips, including most QuickTime, DV and MPEG clips. This greatly streamlines workflow. Now clips can easily move over networks, or fit on DVDs, and be dropped into a live production just minutes before going on-air. Now the clip store can be expanded to hold over 40 hours of clips.

Audio

All clips can have audio. The 100pro and 1000 have a break-out cable with 6 XLR connectors for analog stereo audio: one pair for recording onto the clip store, and two pairs for playing out two channels to send to your mixer. The 2100 adds digital audio AES/EBU. All clip stores also accept audio embedded in the SDI stream.

Animations

The clip store can play spectacular animated titles and logos that were created on the built-in Inscriber CG. Or play animated backgrounds, either full screen or squeezed into a DVE box, such as behind a title. Import animations from all popular systems including Adobe After Effects, Artbeats, Digital Juice and others, because it creates animations out of a sequence of .tga, .tif, .png, .bmp or .jpg files.



Thumbnails PixPad

PixButtons on PixPad

Clip modifiers

Play, pause, rewind, scrub and timecode

Audio portion of iBoB in Slate 2100

Integration of Clip Store with…

Switcher
- On transition to air, auto-start clips & animations
- Use PixPad to view clip content libraries
- See active clip in source & keyer PixButtons

Multi-View Monitoring
- View clips in full motion on monitor
- View clip libraries & tally status
- View clip timecode, countdown & attributes

CG
- Create animated titles in CG, then play on the Clip Store
- Use Clip Store to add an animated background to a title

Still Store and Logo Store
- Capture any clip frame into the still store
- Take logo into CG, animate it, & play out on clip store

Inscriber Character Generator

Included on all models

Broadcast Quality

Create broadcast quality graphics with an Inscriber TitleMotion Pro character generator (CG) that is included in every Broadcast Pix switcher. Inscriber is used worldwide to create stunning graphics in the most demanding broadcast applications. Enjoy superb anti-aliased resolution of less than 16nS, sub pixel scrolling, fine transparency, soft edge, shadows and glows, and even animated titles.

Easy to Use

It has never been so easy to add great graphics to your productions. The Inscriber CG comes with 200 CG templates that make novices look like pros. Just select one from the drop down menu, type in your text and save. Or create your own templates with Inscriber's powerful composition tools, or import one from Photoshop or another system.

On Air Updates

While a production is on-air you can right click an existing graphic to edit it on the fly, or add new ones. Great for a surprise guest title, a game show or updating scores.

Create Logos, Stills & Animations

TitleMotion is a complete graphics system. Import digital photos and a wide variety of graphic formats, including .tga, .bmp, .gif, .jpg, .tif, and .png. In minutes you can grab a logo off a web site, add a shadow and animate it for a beautiful spinning logo. Create backgrounds and over the shoulder graphics for the still store.

Integration of CG with…

Switcher
- Use PixPad to view CG content libraries
- See active CG title in source & keyer PixButtons
- On transition to air, auto-start rolls and crawls
- Change crawl speed on-air with a knob
- Reposition any keyed graphic with a DVE

Multi-View Monitoring
- View CG titles in keys & libraries, with tally status
- Right-click on a CG thumbnail to edit "on the fly"

Clip Store
- Create animated titles & play as a clip
- Animated background for a title

Still Store and Logo Store
- CG creates a still or logo

External Database
- CG Connect option couples an external database to the on-air CG, such as athletes' statistics & pictures.

Audio Control

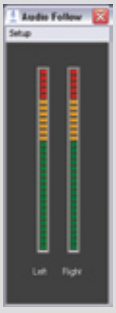
Optional on all models (option 880)

Extend the one man band to audio. Audio-Follow-Video software enables an audio mixer to automatically follow all action on the Slate video switcher. Unlike conventional switchers that utilize antiquated ESAM2 protocols for audio follow, Slate uses MIDI (Musical Instrument Digital Interface), so it works with most audio mixers, and is much more affordable and yet much more powerful. As each video source goes to air, it triggers commands on the mixer to turn on various audio inputs. It can even trigger an entire mixer scene memory, including volume, fade, pan and effects like echo and reverb.

Integration of Audio Control with…

Switcher
- Tie each video source to one or more audio sources, or an entire audio scene.

Multi-View Monitoring
- View audio level meters from some mixers, including Yamaha.



Camera Control

Optional on all models

Add camera control for the ultimate one man band, and further reduce staffing requirements..

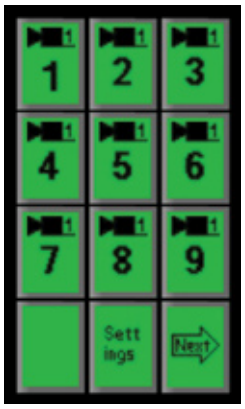
Press the Camera Control button on the panel and all of the device controls are instantly assigned to camera control. Use the PixPad to select the camera you wish to control and then to select preset camera positions. Or manually control a camera with the 3-axis joystick for tilt, pan and zoom. Push it a little to move slowly, or harder to move faster. Set speeds, travel limits and recall speeds. Knobs control focus and iris. CCU (camera control unit) functions can be accessed from the PixPad and knobs, including white balance.

Sony Camera Control Option

Controls the Sony VISCA protocol including the Sony BRC 300 camera (shown at right), EVI-70, EVI-HD, BRCH 700, etc. Control up to 9 Sony cameras with 6 preset positions per camera. This option includes Broadcast Pix software and a cable to connect the workstation's serial output to the VISCA connector on the first camera for a 322 daisy chain (Option 800, and this option is required for 811, 814 or 818). Option 811 is a serial to 422 converter which enables camera runs to be increased from 60 feet (18 meters) to 4,000 feet (1,200 meters). Option 814 and 818 provides several serial ports for star wiring configurations, rather than a daisy chain.

Hitachi Camera Control Option

Control up to 9 Hitachi cameras using their Eagle pan/tilt heads. Control up to 31 preset positions on each camera. The option includes Broadcast Pix software and a serial to 485 converter. (Option 801)



Select Presets on the PixPad

Sony Camera Control

Hitachi Camera Control

Integration of Camera Control with…

Switcher
- Use joystick to control tilt, pan & zoom
- Use knobs for focus, iris & CCU settings
- Use PixPad for preset positions & CCU settings

Multi-View Monitoring
- View cameras in full motion

CG
- Use a script memory to automatically recall a preset position & fade on its title with one button

Still Store and Logos

Included on all models

Every Slate switcher has a built-in still store and logo store. Just select stills or logos on the panel to assign the device controls to it. As with clips and titles, the names of the stills and logos show on the PixButtons and their thumbnails show on the Multi-View. You can have up to five channels of stills and logos.

The still and logo stores accept a wide variety of formats, including .tga, .bmp, .gif, .jpg, .tif, and .png. You can import pictures from a digital camera, download them from the Internet, or bring them in from Photoshop or other graphics software. Slate comes with color bars loaded into the still store.

Every Slate also has a capture function that lets you capture a frame of program, preview or any live input into the still store where it can be used immediately on-air.

PixPad of Stills

Integration of Still Store & Logos with

Switcher
- Use PixPad to see still & logo content libraries & select from them
- Active graphics in source & keyer PixButtons
- Couple stills & chromakeys for a virtual set

Multi-View Monitoring
- View loaded graphics, libraries & tally
- Right-click on a thumbnail to edit a still or logo "on the fly"

CG
- Create stills & logos in CG, including importing a wide variety of graphic formats

Clip Store
- Capture any clip frame into the still store
- Animate a logo in the CG, & play it out on the clip store

HDTV

Optional on all models

A Graceful Path to HDTV

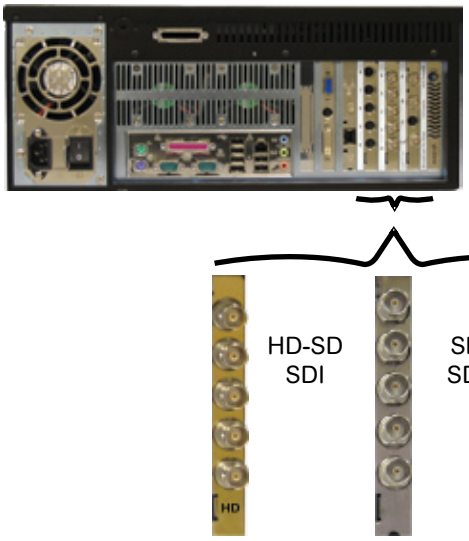
An optional HD-SD I/O board will enable all Slate switchers to add HD-SDI cameras and produce a high definition show. The new HD-SD board will turn all new and existing Slate switchers into an affordable HD-SD control room. The new HD-SD I/O board is expected to be available in late 2007.

HD-SD I/O Board

The HD-SD I/O board is the third I/O board for the Slate switcher, joining an SD-SDI digital board and an analog board. The new board supports HD-SDI in 1080i or 720p, as well as SD-SDI. It provides 4 inputs and 1 output, each of which can be HD or SD. Slate 100 and 1000 switchers can have two boards for up to 8 live HD inputs, and 2 HD outputs. Slate 2100 switchers can have 4 HD live inputs (and 1 HD output) in addition to their 8 SD inputs.

The Slate I/O boards enable the switcher to be reconfigured easily, so for example a Slate analog switcher can upgrade to SDI, or in the future to HD, by adding or swapping I/O boards.

The new HD board takes advantage of Slate's unique progressive architecture to create an HD production with very good picture quality. Conventional SDI switchers do their mixing at 480i (576i in PAL), while Slate's progressive 480p/60 (576p/60) has twice the data rate, so the HD inputs are not as compressed. Progressive also blends well with Slate's closely coupled clip and graphic stores, and provides smoother motion on switching and flying DVE boxes.

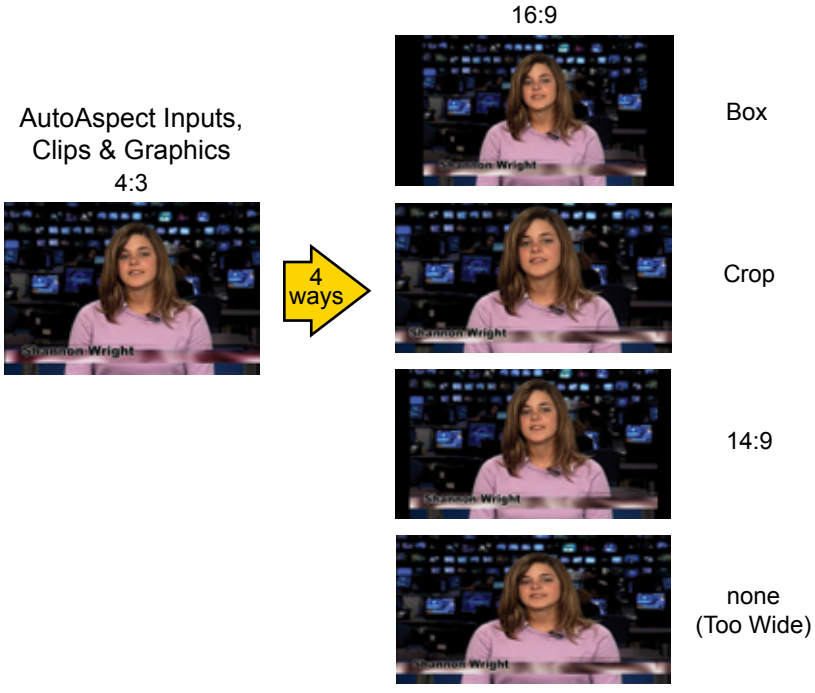


AutoAspect

Included on all models

AutoAspect solves the many challenges of mixing 4:3 and 16:9 content in the same production. It enables 16:9 and 4:3 inputs, clips and graphics to be used interchangeably and mixed together in the same live production, while maintaining the native aspect ratio of each element rather than stretching them. Each input can be set to one of 4 aspect treatments, three of which preserve the native aspect ratio. Conventional switchers can only stretch video when crossing aspect ratios, causing people to look too wide or too thin. Each clip and graphic in the clip and still stores can also be treated in these four ways, and can even be changed from the panel in the middle of a show.

The Dual Aspect Output option (option 129) enable the switcher to simultaneously output 16:9 and 4:3 versions of the same show, with graphics in the corners of each rather than limited to a common safe area. (This option uses Key 4-6 and a PowerAux)



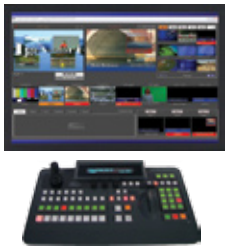
Teams

Included on all models

Slate is exceptional for solo use, but gracefully expands to team use when desired.

Add a Graphics Operator

Some productions, like live sports, have so much spontaneous graphic action that a separate graphics operator is needed. All Slate switchers support two monitors, so all you need to do is add a second monitor. The switcher operator can use one with the panel, touchscreen or SoftPanel, and the graphics operator can use the second monitor with the keyboard and mouse.

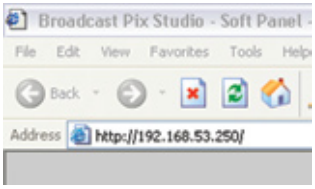


Switcher Operator

Graphics Operator

Add a Network of Operators – even from a far distance

Have as many team members as you want by adding more SoftPanels or even more physical panels to your network. The panels can be locked together, or independent so one person can be on a clip store, while another is on a still store, another on a CG, etc. Operators can be anywhere on the network – in the studio, in the back room, even thousands of miles away, since the SoftPanel opens in a web browser.

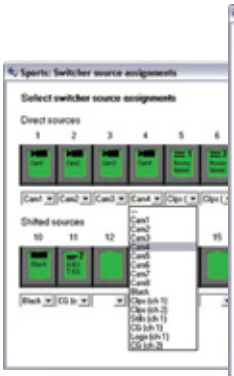


Close up of portion of SoftPanel

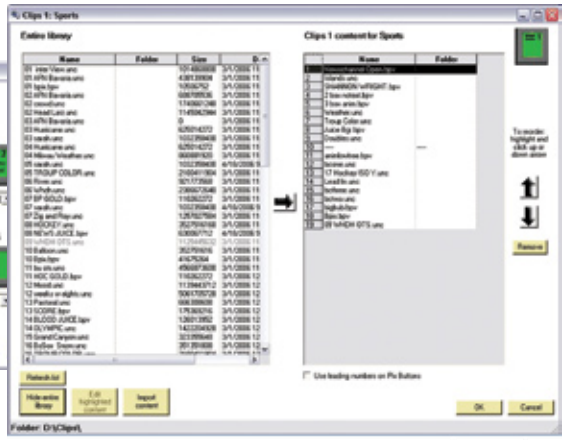
PixMaster

Included on all models

Slate switchers include a powerful pre-production tool called PixMaster, which enables a show to be rapidly prepared. Assign the sources on the switcher. Open the content library for each source, select the graphics and clips for the show, and arrange their order. Memories can be managed. Even edit a show while it is on-air. PixMaster saves a tremendous amount of time compared to conventional studios where each device must be prepared independently.



Assign sources



Select the content for a show from the master library and arrange it.

Memories

Included on all models

Like any professional switcher, Slate has an extensive memory system; but unlike conventional switchers these memories can recall switcher parameters AND the exact content of graphics and clips and their attributes. For example, a single memory can recall a dual box, as shown here, including the key settings for each DVE box, and an animated background from the clip store, and a crawl from the CG. The recall also can remember if the animation and crawl are set to auto-start when taken to air, and the speed of the crawl. A sequence of moves, a script, can include all devices. For example with one press you can select a camera on preview, change its preset position, bring it to air, fade on its specific title from the CG store, and fade off the title.

PixButton on the Mem PixPad

Dual Box Memory

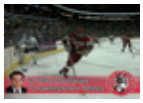
Power Aux

Optional on all models

This option creates the most powerful Aux output on any switcher, which essentially gives you two different program outputs. On conventional switchers, the auxiliary outputs show only a simple background image. PowerAux enables Slate switchers to produce an advanced auxiliary output with up to six keyers applied. This is ideal for producing two simultaneous shows from the same system, for two different audiences, without the high cost and complexity of a two M/E switcher.

Channel Branding

TV & Internet



Projector & Cable TV

Slate Specifications

Video Specifications
- Internal processing is pristine component 10-bit uncompressed digital, with motion processing in progressive 480p 60 in NTSC, or 576p 60 in PAL
- SD digital I/O is SMPTE 259M
- Analog I/O has 10-bit conversion
- NTSC or PAL switchable
- 4:3 or 16:9 switchable
- Requires analog reference

Low Delay
- 1 frame of delay through the system for sources with genlock, even when simultaneously using keys, DVE boxes, AutoAspect inputs and DualAspect outputs.
- Asynchronous sources have 2 frames of delay.
- Slate 2100 can reduce delay of external inputs to 1.5 lines on the iBoB's auxiliary outputs.

Workstation
- Software: Broadcast Pix Switcher Version 6, Inscriber TitleMotion Pro CG, Windows XP Pro
- Hardware: Pentium D Dual-Core, dual disks, dual monitor support, R/W DVD/CD, keyboard, mouse
- Requires a Monitor, and accept two: 1280x1024,1680x1050 and many other sizes.

Clip Audio Specifications
- 100pro, 1000, 2100: embedded in the SDI stream SMPTE 272M, and analog stereo audio I/O
- 2100 adds: AES/EBU digital I/O

Weight	**100**	**1000**	**2100**
• Lbs	48	56	68
• Kg	22	25	31
Power watts	400	450	500

Dimensions

Tower Workstation (100)
- inches 7.5w x 17h x 17.5d
- centimeters 19w x 43h x 44d

Racked Workstation (100pro, 1000, 2100)
- rack units 4
- inches 19w x 20d x 7h
- centimeters 48w x 51d x 18h

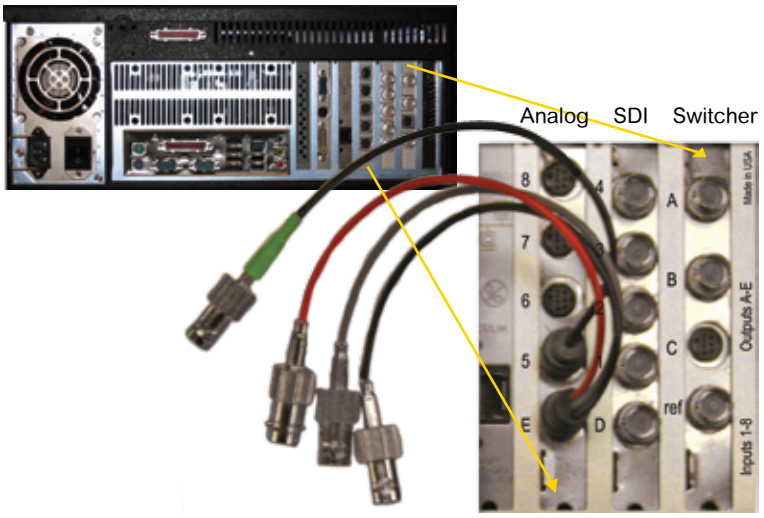
Control Panel (1000, 2100)
- inches 18.5w x 13d x 5.5h
- centimeters 47w x 33d x 14h

iBoB (2100)
- rack units 6
- inches 19w x 3d x 10.5h
- centimeters 48w x 8d x 27h

Slate 100 and 1000

4 or 8 Live Inputs
The Slate 100 and Slate 1000 switchers come with one I/O board as standard equipment, and a second can be added as an option. Each board brings 4 live inputs into the switcher where they are combined with graphics and clips which do not consume inputs as they do on stand-alone switchers.

Digital and/or Analog Inputs
The switcher can be ordered with either an SD SDI digital board, or an SD analog board. Later in 2007 it will also be available with an HD SDI board, see page 11. Analog connections accept S and use breakouts to BNCs for composite and component. Composite break-out cables for every analog connector are included on all models, and 1 component break-out cable is also standard. Sources can be synchronous and /or asynchronous, to support a wide range of inputs from broadcast cameras to DVD players.



Outputs
Each switcher has at least 4 video outputs: 2 SDI digital, 1 analog, and one matching the format of the input card. On dual board switchers, a fifth output is included in the same format as the second I/O board. Outputs can be program or preview, and on the 100pro and 1000 can be clean feed or an auxiliary output of any live input, clip or graphic, or an optional PowerAux.

---------- Standard Configurations ---------

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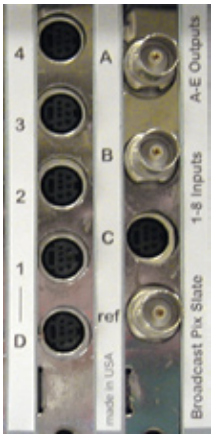

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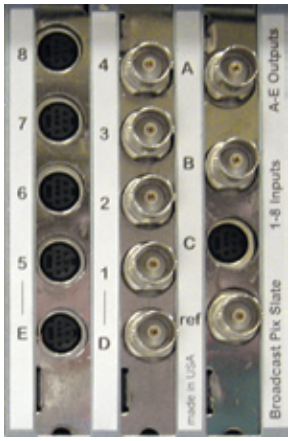
---------- Optional: add option 48 for more digital, or option 47 for more analog ----------



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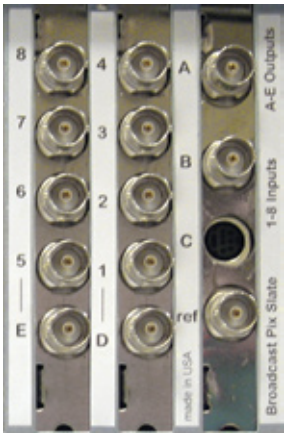

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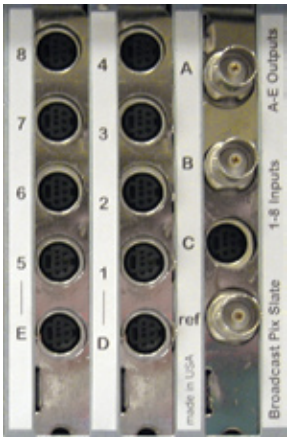

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Slate 2100 includes iBoB

Intelligent Break-out-Box included on 2100, optional on 100 and 1000

More I/O and Fail-Safe

The Slate 2100 has 8 to 12 live inputs, in addition to 14 internal video and key inputs for 2 channels of clips and 5 of graphics. All Slate 2100's include an iBoB with 8 SD SDI fail-safe inputs, four of which have built-in analog converters, for composite, Y/C and component. You can add a Slate I/O board for 4 more inputs, in either SD digital, analog, or later this year in HD-SDI 720p and 1080i, see page 11.

The iBoB provides 4 program outputs in digital and analog, as well as 2 auxiliary outputs. 21 LEDs show the presence of each source, its format and whether it is locked to house reference or is asynchronous. The iBoB has 1 audio input for recording audio into the clip store, plus 2 channels of audio output, one for each clip channel. All provide both balanced analog stereo and digital AES/EBU.

Downstream Key and Tally

The first 3 to 6 keyers are inside the workstation to handle graphics, clips and DVEs. The iBoB adds a downstream key (DSK) for an external key source such as a legacy CG, which uses two live inputs for cut and fill. And there are strong tally relays for 8 cameras.

Fail-Safe

Control rooms now have lots of computers, for graphics, clips, etc. As live production becomes computerized you need to protect yourself from a computer stopping in the middle of a show. The Broadcast Pix workstation is not highly stressed because the hard tasks are done on the Slate boards, but just in case every Slate switcher was designed with unprecedented redundancies built-in.

Ride Through a Workstation Stopping

On the Slate 2100 you can still switch cameras, thanks to a redundant serial connection to the iBoB, which enables the workstation to be bypassed, and cameras to still be switched. On the Slate 100 and 1000 you cannot switch, but your most important camera will automatically go to air if the workstation ever stops.

Ride Through a Power Supply Failure

Redundant power supplies automatically take over if a power supply fails. The Slate 2100 includes redundant power for the panel and iBoB. Redundant power for these and the workstation (Option 204) are optional on all Slate models.

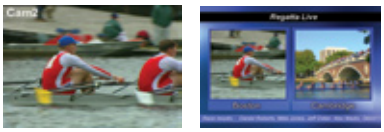
Ride through a Panel Failure

If you have a physical control panel and someone spills a drink on it and kills it in the middle of a show, you can still control everything from the included SoftPanel. No other switcher has this back-up.

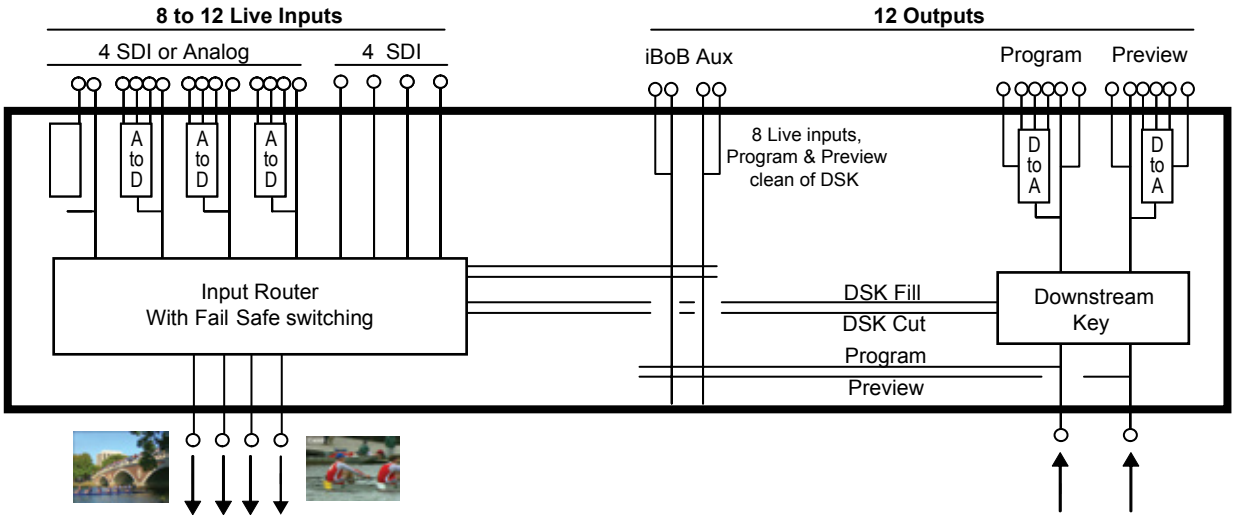
Options

100	100pro	1000	2100	Part #		
					Switcher	
○	○	○	○	120	PowerAux	Enables 3 keys (6 keys with option 156) to be added to Aux outputs
○	○	○	○	126	Keys 4,5 & 6	Adds 3 more keyers (key 4, 5 & 6), each with a DVE
○	○	○	○	129	DualAspect Outputs	Produce 4:3 & 16:9 shows simultaneously (includes & uses 120,126)
○	○	○	●	28	Tally box	Tally output for 8 live sources
○	○	○	○	140	8 Chromakeys	Increases standard 1 chromakey to 8, for creating a virtual set
○	○	1	1	10	Control Panel	Broadcast Pix physical control panel, and includes option 22
○	●	●	●	21	Clean, aux, 5 graphics	Clean feed, auxiliary outputs and upgrade to 5 graphics channels
○	●	●	●	22	DVEs, rolls & crawls	2D DVEs for 3 keyers, plus rolls & crawls for CG
○	●	●	●	50	Pro workstation	Upgrade tower workstation to rack-mounted (4RU) and adds opt 21
1	1	1	○	100	SoftPanel/Scripts	License for simultaneous control by a team member
○	○	○	1	103	3 SoftPanels/Scripts	Licenses for simultaneous control by team members, quantity 3
					More Video I/O	*Note: can add only one of 47, 48 or 49*
○	○	○	○	47	More Analog I/O	4 analog inputs & 1 output (composite, S, YUV) – break-outs included
○	○	○	○	48	More Digital I/O	4 SD SDI inputs and 1 SD SDI output
○	○	○	○	49	HD SD I/O	4 HD SD SDI inputs and 1 output (720p, 1080i, SD) – *Avail. late 2007*
1	1	1	1	46	YUV break-out	1 YUV break-out-cables to BNCs, for more component I/O
○	○	○	●	80	iBoB	Adds the iBoB from the Slate 2100
					CG	
1	1	1	1	160	Another Inscriber CG	Additional Inscribe TitleMotion Pro to create graphics on another PC
○	○	○	○	170	CG Connect	Connects on-air CG to an external database
					Clip Store	
○	●	●	●	30	Clip channel 1	Clip Store with 2 hours uncompressed storage, and audio I/O
○	○	○	●	301	Clip channel 2	Adds 2nd channel of clips, plus another 2 hours of storage - *Req 30*
○	○	○	○	318	More Clip Storage	Double clip storage from 4 to 8 hours with larger disk drives - *Req 301*
					External Device Control	
○	○	○	○	880	Audio Follow Video	Control most audio mixers via MIDI, so audio follows video action
○	○	○	○	800	Sony Cam Control	Control 7 to 9 Sony cameras, with VISCA protocol: software and RS232 cable to connect a serial output to the first camera
○	○	○	○	811	422 converter for Sony	Serial to RS422 converter for Sony Camera control – *Requires 800*
○	○	○	○	814	422 star for Sony – 4	USB to RS422 box with 4 serial ports for Sony star - *Requires 800*
○	○	○	○	818	422 star for Sony – 8	USB to RS422 box with 8 serial ports for Sony star - *Requires 800*
○	○	○	○	801	Hitachi Cam Control	Control up to 9 Hitachi cameras: software and serial to RS485 converter. Requires Pan/Tilt head(s) from Hitachi or Display Devices.
○	○	○	○	823	360 DDR Control	Control up to 3 channels of a 360 Systems server with VDCP/Louth protocol, includes software and USB to RS422 break-out-box
					Redundant Power	
○	○	○	●	201	for Control Panel	Adds a second external redundant power supply
○	○	○	●	202	for iBoB	Adds second external redundant power supply
○	○	○	○	204	for Workstation	Adds a second internal, hot swappable, redundant power supply
					Services	
○	○	○	○	601	On site Training 1	First Day. Includes expenses, with 4 weeks notice
○	○	○	○	602	On site Training	Each additional day, to extend the training session in Option 601
○	○	○	○	620	Extended Warranty	Adds a second year of parts and labor
				651	Extended Software	Adds a second year or years of free software upgrade, sold by year
0	0	1	1	680	Owner's Manual	Additional Hard-copy of owners manual, 1 is included with system

● - included ○ - optional 1 - one included, more optional

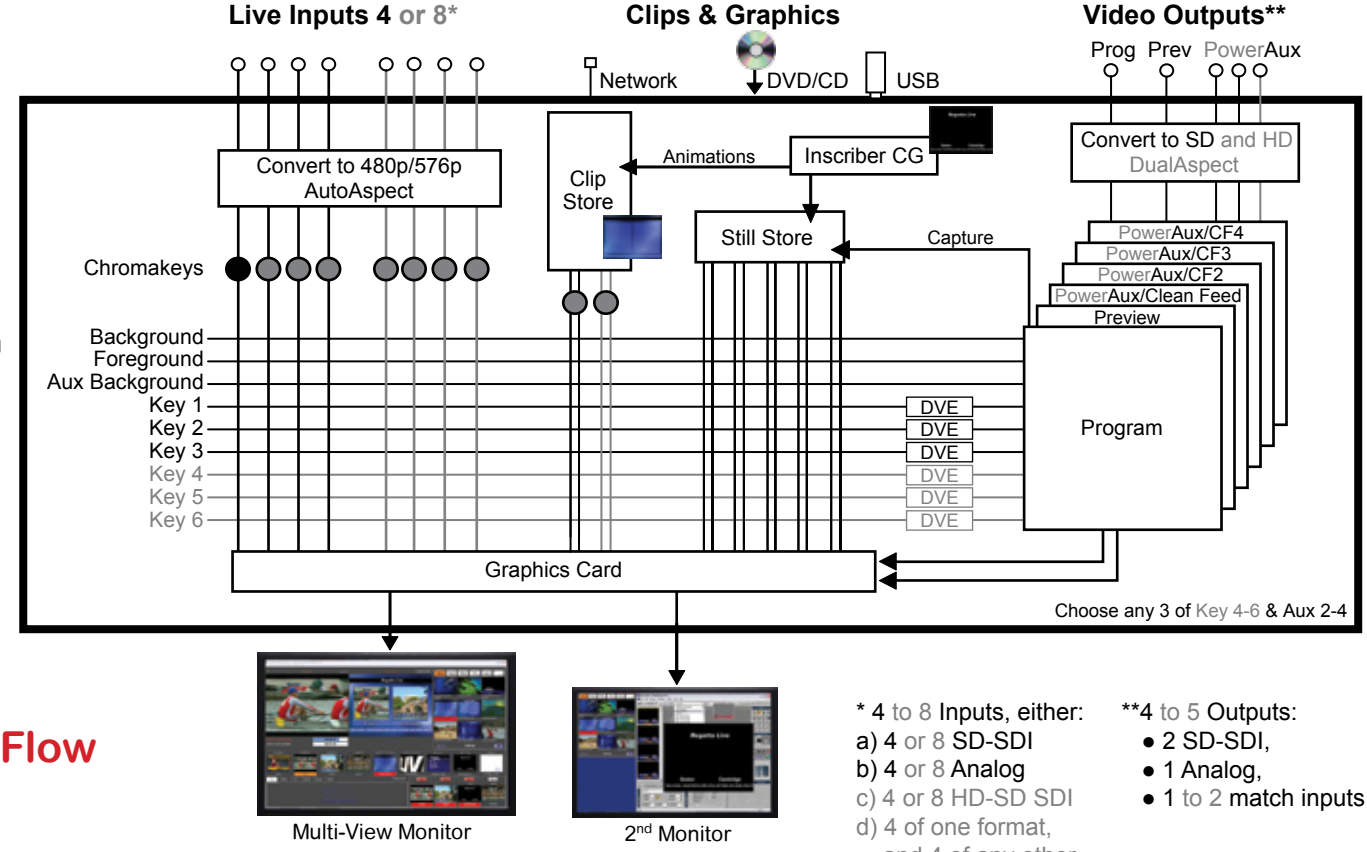


iBoB included with Slate 2100



Slate Workstation

(gray is optional on most models)



Multi-View Monitor

2nd Monitor

Video Flow

* 4 to 8 Inputs, either:
a) 4 or 8 SD-SDI
b) 4 or 8 Analog
c) 4 or 8 HD-SD SDI
d) 4 of one format, and 4 of any other

**4 to 5 Outputs:
- 2 SD-SDI,
- 1 Analog,
- 1 to 2 match inputs

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Broadcast Pix

The Switcher Redefined